

**CLAIMS****WHAT IS CLAIMED IS:**

- 1    1.    A method to model information quality and maturity, comprising:  
2            associating quality metrics, levels of maturity, quality capabilities with  
3    one another; and  
4            providing an information quality map, wherein the map represents the  
5    quality metrics, the levels of maturity, and the quality capabilities integrated  
6    and linked with one another on the map.
- 1    2.    The method of claim 1 further comprising representing the map as a  
2    geometric shape.
- 1    3.    The method of claim 2 wherein in representing, the geometric shape  
2    is a three-dimensional object, wherein each quality metric is assigned to a  
3    particular connecting line and forms a single unique line of the three-  
4    dimensional object, each capability is assigned to a single unique surface  
5    area that is formed on the three-dimensional object by a unique set of three  
6    connecting lines, and each level is assigned to one of the three connecting  
7    lines.
- 1    4.    The method of claim 1 further comprising providing the method as a  
2    remote electronic service.
- 1    5.    The method of claim 4 further comprising, presenting the map on a  
2    display, wherein an interface is used to traverse the map.
- 1    6.    The method of claim 5 wherein presenting further includes:  
2            permitting the map to be dynamically traversed from links associated  
3    with the map and activated via the interface; and  
4            updating different electronic views for the map on the display after

5 activation of one of the links.

1 7. The method of claim 1 wherein in associating, the quality metrics  
2 include at least one of functionality, integrity, sufficiency, availability,  
3 usability, contextual, complexity, responsiveness, adaptability, robustness,  
4 affordability, and accessibility defined values, and wherein the capabilities  
5 include values for at least one of power, meaningfulness, productivity,  
6 utilization, scalability, resiliency, serviceability, and value added, and  
7 wherein the levels of maturity include values for at least one of  
8 breakthrough, leading edge, advanced, intermediate, and foundation.

1 8. A method to model information quality and maturity, comprising:  
2 using a service for accessing an interactive information modeling tool;  
3 providing information quality metric values to the information  
4 modeling tool based on metric variables defined in the information modeling  
5 tool; and  
6 receiving a visual map from the service depicting an information  
7 quality current state for an information repository based on the values.

1 9. The method of claim 8 further comprising, accessing the information  
2 modeling tool for selecting an information quality desired state for the  
3 information repository.

1 10. The method of claim 9 further comprising, receiving an updated visual  
2 map from the service depicting the current state, one or more intermediate  
3 states, and the desired state, wherein the one or more intermediate states  
4 define steps that are needed to move an information quality of the  
5 information repository from the current state to the desired state.

1 11. The method of claim 8 wherein using further includes accessing the  
2 service remotely via an external network.

1 12. The method of claim 8 wherein using further includes accessing the  
2 service locally via an internal network.

1 13. The method of claim 8 wherein providing further includes, generating,  
2 by the information modeling tool, three information quality level values and  
3 an information quality capability value for each set of three provided  
4 information quality metric values.

1 14. The method of claim 8 wherein receiving further includes depicting,  
2 by the service, the visual map with discernable and interactive links for each  
3 set of three metric values, wherein each set of three metric values are  
4 associated with discernable and interactive links for levels associated with  
5 information quality maturity, and capabilities associated with the information  
6 quality, and wherein sets of the three metric variables, the corresponding  
7 levels and the corresponding capabilities are integrated with one another on  
8 the visual map.

1 15. An information modeling system, comprising:  
2 an information modeling tool; and  
3 an interface for interacting with the information modeling tool;  
4 wherein the information modeling tool models information quality for  
5 an information repository, and wherein the interface is used for providing  
6 information quality metric values for a current state of the information  
7 repository, the information modeling tool uses the information quality metric  
8 values to produce a map representing the current state.

1 16. The information modeling system of claim 15 wherein the interface is  
2 also used for selecting an information quality desired state for the  
3 information repository, and wherein the information modeling tool updates

4 the map for representing the current and desired states simultaneously on  
5 the map.

1 17. The information modeling system of claim 16 wherein the information  
2 modeling tool updates the map to simultaneously represent the current  
3 state, one or more intermediate information quality states necessary to  
4 reach the desired state, and the desired state.

1 18. The information modeling system of claim 15 wherein the interface is  
2 used to interact with the information modeling tool via a remote service.

1 19. The information modeling system of claim 15 wherein the information  
2 modeling tool also provides, via interactions from the interface, discernable  
3 paths within the map from moving from the current state to an information  
4 quality desired state.

1 20. The information modeling system of claim 19 wherein the paths are  
2 determined by the tool based on selections made from weighted alternative  
3 paths that are available within the map from the current state in the direction  
4 of the desired state.

1 21. An information modeling data structure residing on a computer-  
2 accessible medium for modeling information quality, the data structure  
3 comprising:  
4 quality metric variables;  
5 quality level values; and  
6 quality capability values;  
7 wherein sets of three metric values that are assigned to three of the  
8 metric variables are uniquely associated and linked with a unique one of the  
9 quality capability values and three of the quality level values.

1 22. The information modeling data structure of claim 21 further  
2 comprising, the sets of three quality metric values are assigned to the quality  
3 metric variables based on a current state of an information repository.

1 23. The information modeling data structure of claim 22, wherein the sets  
2 of three quality metric values determine the three quality level values and a  
3 unique quality capability value.

1 24. The information modeling data structure 23, wherein the data  
2 structure is used to visually depict on a display a current state, needed  
3 intermediate states, and a desired state for information quality of an  
4 information repository.

1 25. The information modeling data structure of claim 21, wherein the data  
2 structure is visually depicted as a three dimensional interactive map for  
3 current, projected, and desired states of information quality associated with  
4 an information repository.

1 26. The information modeling data structure of claim 21 further  
2 comprising, links that are accessible and activated via an interface for  
3 viewing the data structure, and wherein each links depicts an association  
4 between the variables.

1 27. The information modeling data structure of claim 21 wherein one or  
2 two metric values for a given set of three metric variables are null values.